

U.S.S.N. 10/808,157
Attorney Docket No. 2003-0022-01

IN THE DRAWINGS:

Applicants submit herewith 18 sheets of replacement drawings for FIGS. 1-19. In FIG. 12, previously omitted element 234 has been added. Support for this amendment may be found, e.g., in Applicants' specification at page 18, line 21 to page 19, line 30.

U.S.S.N. 10/808,157

Attorney Docket No. 2003-0022-01

Remarks

Claims 1-127 are pending in the above-captioned United States Patent Application. Claims 13-28, 35-42, 55-70, 77-84, 97-112, and 119-126 have been withdrawn. Claims 29-34, 71-76 and 127 are allowed. Claims 1-4, 8, 12, 43-46, 50, 54, 85-88, 92, and 96 stand rejected, and claims 5-7, 9-11, 47, 49, 51-53, 89-91, and 93-95 are objected to. Applicants have cancelled claims 4, 8, 12, 46, 50, 54, 88, 92, and 96, and have amended claims 2, 44, and 86.

Drawings and Specification

The drawings stand objected to as failing to comply with 37 C.F.R. 1.84(p)(5) because FIG. 12 does not include reference 34 identified on page 19, lines 29-30 of Applicants' specification. Applicants have corrected the inadvertent typographical error on page 19, line 29 to indicate that the proper reference numeral is 234. Support for this amendment may be found, e.g., in Applicants' specification at page 18, line 21 to page 19, line 30 and in FIGS. 11-13. Applicants submit herewith 18 sheets of replacement drawings for FIGS. 1-19. In FIG. 12, previously omitted element 234 has been added.

The 35 U.S.C. § 112 Rejections

Claims 2, 44, and 86 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

Applicants have amended claims 2, 44, 86 in order to particularly point out that the flexure mount comprises a plurality of slots in the mirror mounting frame configured to allow relative movement between a flexure body and the mirror mounting frame formed from the material of the mirror mounting frame. Accordingly, Applicants submit that claims 2, 44, and 86 are in condition for allowance.

The Double Patenting Rejections

Claims 4, 8, 12, 46, 50, 54, 88, 92 and 96 stand objected to under 37 C.F.R. 1.75 as being duplicates of claims 3, 7, 11, 45, 49, 53, 87, 91 and 95, respectively. Applicants have cancelled claims 4, 8, 12, 46, 50, 54, 88, 92 and 96.

USSN 10/808,157
Attorney Docket No. 2003-0022-01

The 35 U.S.C. § 102 Rejections

Claims 1, 43 and 85 stand rejected under 35 U.S.C. § 102(h) as being anticipated by U.S. Patent No. 5,801,891 to Lloyd (hereinafter, *Lloyd*).

Lloyd relates to a flexure structure for mounting an element such as a mirror in an optical device to a frame such as a telescope support structure that includes a flexure blade defining a fork having three coplanar tines. A mounting pad is located on the center tine for attaching the flexure blade to the mirror. A pair of mounting feet are located on the outside tines for attaching the flexure blade to the frame. The relative sizes of the tines being such that zero moment is applied to the mirror by the flexure structure when the mirror is displaced relative to the frame.

On page 5 of the Office Action mailed October 4, 2006, the Examiner stated that “*Lloyd* does not disclose a laser light source system with fast moving angularly positionable tuning mirror.” Applicants submit that *Lloyd* neither discloses nor suggests a high power narrow band, high repetition rate laser light source system line narrowing unit”, nor does *Lloyd* disclose or suggest “a fast moving angularly positionable tuning mirror.” On page 4 of the Office Action mailed May 2, 2007, the Examiner states that “the preamble is not considered patentable weight when the claim body fails to provide the limitation from the preamble.” Applicants submit that “fast moving angularly positionable tuning mirror” is an element of the claim, and is not part of the preamble. Furthermore, the “fast moving angularly positionable tuning mirror” recited as an element in the body of the claim is a component of the “line narrowing unit” of the “high power narrow band, high repetition rate laser light source” recited in the preamble. Thus, Applicants assert that *Lloyd* does not disclose or suggest each element of Applicants’ claimed invention, and that the preamble should be given patentable weight as the claim body provides limitations on the line narrowing unit of the laser light source recited in the preamble.

Applicants submit that the invention of *Lloyd* relates to a flexure mounting structure useful for mounting a mirror element in a telescope (see, e.g., 1: 7-10 of *Lloyd*) and would not be capable of being used in a laser system such as Applicants’ high power, narrow band laser light source system.

U.S.S.N. 10/808,157
Attorney Docket No. 2003-0022-01

In addition, Applicants further submit that one of skill in the art would not be motivated to combine the mirror mounting apparatus of *Lloyd* with a high power narrow band, high repetition rate laser light source system because the mirror mounting apparatus of *Lloyd* would not provide adequate characteristics to be able to hold a high power narrow band laser light source to a specific wavelength that would be needed for applications such as lithography. Although the mirror mount of *Lloyd* may be sufficient for telescope systems, it would not be stiff enough in the direction perpendicular to the mirror surface for laser lithographic applications. Thus, the forces exerted on the optical element in *Lloyd*, if it were utilized in a laser system such as the Applicants' system, would introduce discernable and unacceptable effects on such things as beam profile, wavelength, bandwidth or the like. These effects are unacceptable for applications such as lithography, as described in Applicants' specification. An advantage of Applicants' claimed invention is to prevent the introduction of discernable and unacceptable effects on such things as beam profile, wavelength, bandwidth of the laser light.

Applicants submit that at least for the reasons above, Claims 1, 43, and 85 are in condition for allowance. Accordingly, Applicants submit that Claims 2, 3, 5-7, 9-11 which depend from Claim 1, Claims 44, 45, 47-49, and 51-53 which depend from Claim 43, and Claims 86, 87, 89-91, and 93-95 which depend from 85, are allowable.

The 35 U.S.C. § 102(e) Rejections

Claims 1, 2, 43-46 and 85-88 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,661,962 to Calvet et al. (hereinafter, *Calvet*).

As similarly asserted above in connection with *Lloyd*, Applicants submit that *Calvet* neither discloses nor suggests a high power narrow band, high repetition rate laser light source system line narrowing unit", nor does *Calvet* disclose or suggest "a fast moving angularly positionable tuning mirror." On page 5 of the Office Action mailed May 2, 2007, the Examiner states that "the preamble is not considered patentable weight when the claim body fails to provide the limitation from the preamble." Applicants submit that "fast moving angularly positionable tuning mirror" is an element of the claim, and is not part of the preamble. Furthermore, the "fast moving angularly positionable tuning mirror" recited as an element in the body of the claim is a component of the "line

RECEIVED
CENTRAL FAX CENTER

JUL 05 2007

USSN 10/808,157

Attorney Docket No. 2003-0022-01

narrowing unit" of the "high power narrow band, high repetition rate laser light source" recited in the preamble. Thus, Applicants assert that *Calvet* does not disclose or suggest each element of Applicants' claimed invention, and that the preamble should be given patentable weight as the claim body provides limitations on the line narrowing unit of the laser light source recited in the preamble.

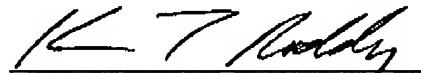
Applicants submit that at least for the reasons above, Claims 1, 43, and 85 are in condition for allowance. Accordingly, Applicants submit that Claims 2, 3, 5-7, 9-11 which depend from Claim 1, Claims 44, 45, 47-49, and 51-53 which depend from Claim 43, and Claims 86, 87, 89-91, and 93-95 which depend from 85, are allowable.

Conclusion

For at least the above reasons, Applicants submit that claims 1-3, 5-7, 9-11, 29-34, 43-45, 47-49, 51-53, 71-76, 85-87, 89-91, 93-95, 113-118, and 127 are in condition for allowance.

Applicants do not believe that any other fees or charges are due for the continuing prosecution of the above captioned U.S. Patent Application, but in the event that there are the Commissioner is hereby authorized to charge the Deposit Account of applicants' assignee, Cymer, Inc. Deposit Account No. 03-4060 for any such fees or charges.

Respectfully submitted,


Kevin T. Ruddy, Reg. No. 50,577

July 5, 2007

Cymer, Inc.
17075 Thommint Court
MS 4/2D
San Diego, CA 92127
Customer No. 21773
Telephone: (858) 385-7185
Facsimile: (858) 385-6025